

**CLAIMS:**

## 1. A structure recovery system comprising:

analysis means for analyzing the structure of a data string written in accordance with a predetermined rule and for detecting an error in accordance with said predetermined rule; and

recovery means for, upon the receipt of a request from said analysis means, correcting in accordance with said predetermined rule said error detected in said data string by said analysis means,

wherein said recovery means includes a set of correction means that individually employ simple functions for correcting specific types of errors, and

wherein said recovery means selectively employs said correction means based on the error type in accordance with said predetermined rule in order to correct a variety of errors in said data string.

## 2. A parsing system, for performing the parsing of a data string written in accordance with a predetermined rule, comprising:

a parser for performing a parsing process; and

a syntax recovery unit for, upon the receipt of a request from said parser, correcting an error detected by said parser in said data string,

wherein said syntax recovery unit can change the contents of a correction.

3. The parsing system according to claim 2, wherein multiple types of said syntax recovery units are prepared in accordance with the types of errors that are detected by said parser in said data string, and each of said syntax recovery units has a function for correcting a specific type of error.

4. The parsing system according to claim 3, further comprising:

corresponding information storage means for storing information that correlates the type of data string with a syntax recovery unit for recovering from an error in said data string,

wherein, in accordance with the type of target data string, said parser employs said information stored in said corresponding information storage means to set up said syntax recovery unit for the correction of an error upon the receipt of a request.

5. The parsing system according to claim 3, wherein, when said target data string includes an element that is not defined by a rule that said parser employs for said parsing process, at least one of said syntax recovery units is activated and performs a process for replacing said rule used by said parser with a rule that defines said element in said target data string, and for returning said target data string to said parser.

6. The parsing system according to claim 2, further

comprising:

a lexical analyzer, for performing token analysis for said target data string; and

a token recovery unit, for correcting an error detected by said lexical analyzer in said token in said data string,

wherein said token recovery unit can change the contents of a correction.

7. The parsing system according to claim 6, wherein multiple types of said token recovery units are prepared in accordance with the type of error that is detected by said lexical analyzer in said data string, and each has a function for correcting a specific type of error.

8. A system for converting a data string in a predetermined form into a data string in another form comprising:

an analyzer for analyzing said data string;

a recovery unit, for, upon the receipt of a request from said analyzer, correcting an error detected in said data string by said analyzer; and

a converter, for changing a data form in accordance with the results obtained by said analyzer,

wherein multiple types of said recovery units are prepared in accordance with the type of error that is detected by said analyzer in said data string, and each has a function for correcting a specific type of error.

9. The conversion system according to claim 8, wherein said analyzer is parsing means for parsing said data string, and

said recovery unit is syntax recovery means for correcting an error in said data string in accordance with a syntax rule.

10. A computer comprising:

an input unit for receiving a data string written in accordance with a predetermined rule;

a processor for processing said data string by using a function implemented by program control; and

an output unit for outputting said data string obtained by said processor,

wherein said processor includes

an analyzer for analyzing said data string; and

a recovery unit, for, upon the receipt of a request from said analyzer, correcting an error detected in said data string by said analyzer, and

wherein multiple types of said recovery units are prepared in accordance with the type of error that is detected by said analyzer in said data string, and each has a function for correcting a specific type of error.

11. The computer according to claim 10, wherein said analyzer is parsing means for parsing said data string, and said recovery unit is syntax recovery means for correcting an error in said data string in accordance with a syntax rule.

12. A parsing method for parsing a data string written in accordance with a predetermined rule comprising the steps

of:

selecting a program module used to correct an error in a target data string in accordance with a syntax rule;

parsing said data string;

issuing a correction request to said program module when said parsing detects an error in accordance with said syntax rule in said data string; and

correcting said error using said program module, and parsing the obtained data string.

13. The parsing method according to claim 12, wherein said step of selecting a program module for use includes the steps of:

examining the type of said target data string; and

employing said type of said target data string to select said program module based on a correlation that is defined in advance.

14. The parsing method according to claim 12, further comprising the step of:

replacing, upon the receipt of an instruction from said program module to which said correction request has been issued, a rule used for said parsing with a different rule,

wherein, at said step of performing said parsing for the resultant data string, said parsing is performed for said data string written in accordance with said different rule.

15. A storage medium on which input means of a computer

stores a computer-readable program product that permits said computer to perform:

analysis means for analyzing said data string; and

recovery means, for, upon the receipt of a request from said analysis means, correcting an error detected in said data string by said analysis means, and

wherein multiple types of said recovery means are prepared in accordance with the type of error that is detected by said analysis means in said data string, and each has a function for correcting a specific type of error.

16. A program transmission apparatus comprising:

storage means for storing a program product that permits a computer to perform

analysis means for analyzing said data string, and

recovery means, for, upon the receipt of a request from said analysis means, correcting an error detected in said data string by said analysis means; and

transmission means for reading said program product from said storage means and transmitting said program product,

wherein multiple types of said recovery means are prepared in accordance with the type of error that is detected by said analysis means in said data string, and each has a function for correcting a specific type of error.